# STATUS REPORT ON SIRTF

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# Mission Summary

- 85 cm telescope cooled to 5.5 K
- Earth-trailing Solar orbit
  - Distance to Earth increases to $\sim 0.5$ AU in 5 years
  - All the thermal advantages of $L_2$, but requires no station keeping.
- Launch scheduled for 2001 December 1.
- Three instruments
  - Infrared Array Camera (IRAC)
  - Mid-Infrared Photometer for SIRTF (MIPS)
  - Infrared Spectrograph (IRS)

# SIRTF Science

- The design of SIRTF was driven by the "big four" science themes:
  - The Early Universe
  - Starburst galaxies and AGN
  - Young stars and planetary systems
  - Brown dwarfs and cool stars

# IRAC

- picture of IRAC
- sensitivity numbers from Sirtf Science Center web site

# MIPS

- picture of MIPS
- sensitivity numbers from Sirtf Science Center web site

# IRS

- picture of IRS
- sensitivity curves from Sirtf Science Center web site

# Sensitivity Comparison with ISO

(figure)

# Mission Lifetime

- Requirement: >2.5 years
- Best-estimate lifetime with telescope kept at 5.5 K: ~5 years
- Estimated lifetime with telescope temperature kept at 5.5 K only for MIPS observations: 5.7 years

# Proposal Schedule

- Call for Legacy Proposals was released yesterday (check the web!)
- First GO release after launch, when on-orbit performance is known